

To: Brown, Anthony R (RM)[anthony.brown@bp.com]
Cc: Halsey, Ronald H[ronald.halsey@bp.com]
From: Deschambault, Lynda
Sent: Fri 4/14/2017 7:37:00 PM
Subject: RE: Leviathan Weekly Update

Thank you! Much appreciated, Reviewing now. Initial review concurs that the EPA data sondes monitoring data shows that pH did not change significantly in Leviathan Creek below the discharge between the time the Water Board first observed the separation on April 6 and when Atlantic Richfield completed the second round of repairs on the morning of April 11.

Appreciate that ARC doesn't have additional flow measurements, But could you please confirm my estimate using what we do know----that the pond was lowered by one foot, and that pond 4 is about one acre => hence 325,000 gallons?

And what do we know about the water in pond 4 compared to the winter flows of CUD and delta seep? The photos show a significant difference in coloration, and I'd like to know more about your assessment of the sediment in pond 4 or in the discharge pipe?

Also, how was the pond 4 sample collected (i.e. at the surface, or at the repaired opening, or a composite, stirred with sediment?)

Lynda

From: Brown, Anthony R (RM) [mailto:anthony.brown@bp.com]
Sent: Friday, April 14, 2017 11:58 AM
To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>
Cc: Halsey, Ronald H <ronald.halsey@bp.com>
Subject: RE: Leviathan Weekly Update

Hi Lynda – Here is the Weekly Update report including the revised Table 1, containing the additional monitoring results for the April 7, 2017 Pond 4 discharge sample, which Mike Johnson sent to you separately last night. We have not determined flow rates or discharge volumes from the Pond 4 overflow pipe. We don't have flow measurements, and we don't know when the pipe separation first occurred, how large the opening was, the level of water prior to

the separation occurring, the rate of water flow into the pond, or the length, diameter and condition of the subsurface piping. We do know, again as confirmed from the EPA data sonde monitoring data, that pH did not change significantly in Leviathan Creek below the discharge between the time the Water Board first observed the separation on April 6 and when Atlantic Richfield completed the second round of repairs on the morning of April 11. We do not have any other information to provide at this time.

From: Deschambault, Lynda [<mailto:Deschambault.Lynda@epa.gov>]
Sent: Friday, April 14, 2017 8:27 AM
To: Brown, Anthony R (RM)
Cc: tavassoli, lily; Wirtschafter, Joshua
Subject: RE: Leviathan Weekly Update

Tony, my request was to have your One Complete Summary or incident report by EOD yesterday.

So that EPA can provide an update to the stakeholders today.

Could you please utilize whatever resources needed to complete the report EPA requested asap?

Lynda

From: Brown, Anthony R (RM) [<mailto:anthony.brown@bp.com>]
Sent: Friday, April 14, 2017 6:41 AM
To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>
Subject: RE: Leviathan Weekly Update

Hi Lynda, Mike Johnson is out on leave today (Good Friday) and through the Easter holiday weekend (along with a bunch of others.) The note below will be relayed. As a reminder – we have the regularly scheduled monthly update call next week on Tuesday morning. Hope this helps... Tony...

From: Deschambault, Lynda [<mailto:Deschambault.Lynda@epa.gov>]
Sent: Thursday, April 13, 2017 5:50 PM
To: Carey, Douglas@Waterboards

Cc: Greg Reller; Cory Koger; Wirschafter, Joshua; Brown, Anthony R (RM); Cohen, Adam; Johnson, Mike (COPPER ENVIRONMENTAL CONSULTING); Lombardi, Marc (marc.lombardi@amecfw.com); Stetler, Chris@Waterboards; Ferguson, Scott@Waterboards; Tom Bloomfield (tbloomfield@thegallaghergroup.com) (tbloomfield@thegallaghergroup.com); Coupe, David@Waterboards; Kouyoumdjian, Patty@Waterboards
Subject: RE: Leviathan Weekly Update

Thank you.

Tony/Mike, please incorporate these in to your revised weekly report with appropriate title.

As noted the text should Include approximate estimates of flow rates, and volumes.

Please include the before and after staff readings

Thank you.

From: Carey, Douglas@Waterboards [<mailto:douglas.carey@waterboards.ca.gov>]
Sent: Thursday, April 13, 2017 3:34 PM
To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>
Cc: Greg Reller <gr@burlesonconsulting.com>; Cory Koger <Cory.S.Koger@usace.army.mil>; Wirschafter, Joshua <Wirschafter.Joshua@epa.gov>; Brown, Anthony R (RM <anthony.brown@bp.com>; Cohen, Adam <Adam.Cohen@dgsllaw.com>; 'Mike Johnson' <mike.johnson@copperenv.com>; Lombardi, Marc (marc.lombardi@amecfw.com) <marc.lombardi@amecfw.com>; Stetler, Chris@Waterboards <Chris.Stetler@waterboards.ca.gov>; Ferguson, Scott@Waterboards <scott.ferguson@waterboards.ca.gov>; Tom Bloomfield (tbloomfield@thegallaghergroup.com) (tbloomfield@thegallaghergroup.com) <tbloomfield@thegallaghergroup.com>; Coupe, David@Waterboards <David.Coupe@waterboards.ca.gov>; Kouyoumdjian, Patty@Waterboards <patty.kouyoumdjian@waterboards.ca.gov>
Subject: RE: Leviathan Weekly Update

Email 3 of 3

-

Lynda,

As requested, attached are a few additional photos of the Pond 4 (near HDS) area taken by Water Board personnel between April 6 and April 11, 2017. The time and date stamp on the photos is helpful to follow the situation as originally observed on April 6 through the April 11, 2017 standpipe repair. I'll send photos in three parts as some firewalls are very restrictive.

Photo 170406 tz 013 is when the damaged standpipe in Pond 4 was first observed by Water Board personnel. Note approximate staff reading.

Photos 170407 tz 002, 003 and 005 are during initial repair activities.

Photo 170407 tz 046 is of failed initial repair.

Photo 170411 tz 015 is of final repair. Note staff reading.

Note: During the storm that passed through the area April 6 through April 9, 2017, approximately 2 to 3 inches of precipitation (liquid) fell on the site.

Douglas Carey, P.G.

Senior Engineering Geologist

Leviathan Mine

Regional Water Quality Control Board, Lahontan Region

2501 Lake Tahoe Blvd.

South Lake Tahoe, CA 96150

(530) 542-5468

douglas.carey@waterboards.ca.gov